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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/771,569	01/30/2001	James P. Clarkin	P 00277116	1204
909	7590	12/09/2004	EXAMINER	
PILLSBURY WINTHROP, LLP			TRAN, MY CHAU T	
P.O. BOX 10500				
MCLEAN, VA 22102			ART UNIT	PAPER NUMBER
			1639	

DATE MAILED: 12/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	09/771,569	CLARKIN ET AL.
	<b>Examiner</b>	<b>Art Unit</b>
	MY-CHAU T TRAN	1639

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1) Responsive to communication(s) filed on 14 October 2004.  
2a) This action is **FINAL**.                                   2b) This action is non-final.  
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4) Claim(s) 1-43 is/are pending in the application.  
4a) Of the above claim(s) 2,6,7,16,18,32 and 37-41 is/are withdrawn from consideration.  
5) Claim(s) \_\_\_\_\_ is/are allowed.  
6) Claim(s) 1,3-5,8-15,17,19-31,33-36,42 and 43 is/are rejected.  
7) Claim(s) \_\_\_\_\_ is/are objected to.  
8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

9) The specification is objected to by the Examiner.  
10) The drawing(s) filed on 08 May 2001 is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) All    b) Some \* c) None of:  
1. Certified copies of the priority documents have been received.  
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) Notice of References Cited (PTO-892)  
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 10/14/2004.

4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) Notice of Informal Patent Application (PTO-152)  
6) Other: \_\_\_\_\_.

## DETAILED ACTION

### *Status of Claims*

1. Applicant's amendment filed 10/14/2004 is acknowledged and entered. Claim 1 has been amended. Claims 42-43 have been added.
2. Claim 1 was amended by the amendment filed on 2/10/2004, and 8/19/2003.
3. Claims 1-43 are pending.

### *Election/Restrictions*

4. Claims 2, 6-7, and 37 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to **nonelected inventions**, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 11/20/03.
5. Applicant has elected the following species for the elected invention (Claims 1, 3-5, 8-36, and 38-43):
  - a. Species A/F (channel cross sectional area): 0.0001 mm<sup>2</sup> to 1mm<sup>2</sup>.
  - b. Species B/G (channel length): 1 mm to 1 km
  - c. Species C (substrate): glass
  - d. Species D (exterior coating): polyimide
  - e. Species E (interior coating): hydrophobic bonded phases
  - f. Species H (endcap substrate): glass

6. Claims 16, 18, 32, and 38-41 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to ***nonelected species***, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 3/10/03.

***Priority***

7. This application claims priority to a provisional application 60/254,881 filed 12/13/2000.

***Information Disclosure Statement***

8. The information disclosure statement (IDS) submitted by applicant filed on 10/14/2004 is acknowledged and considered as noted on PTO-1449.

9. Claims 1, 3-5, 8-15, 17, 19-31, 33-36, and 42-43 are treated on the merit in this Office Action.

***Withdrawn Rejections***

10. The rejections of claims 1, 3-5, 8-15, 17, 19-31, and 33-36 under 35 USC 112, second paragraph, as being indefinite has been withdrawn in light of applicant's amendment of claim 1.

11. The rejection of claims 1, 3-4, 8-10, 14-15, 19, 21, 26, 28-29, 31, and 34-36 under 35 USC 102(b) as being anticipated by Anderson et al. (US Patent 5,922,591) has been withdrawn in light of applicant's amendment of claim 1 (see Response to Argument below).

12. The rejection of claims 1, 3-5, 8-10, 14-15, 17, 20-31, and 33-36 under 35 USC 102(b) as being anticipated by Beattie (US Patent 5,843,767) has been withdrawn in view of applicant's amendment of claim 1 (see Response to Argument below).

13. The rejection of claims 1, 5, and 11-13 under 35 USC 102(b) as being anticipated by Jansen (US Patent 5,173,097) has been withdrawn in light of applicant's amendment of claim 1 (see Response to Argument below).

14. The rejection of claims 1, 3-4, 8-10, 14-15, 19, 21, 26, 28-29, 31, and 34-36 under 35 USC 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Anderson et al. (US Patent 5,922,591) has been withdrawn in view of applicant's amendment of claim 1 (see Response to Argument below).

15. The rejection of claims 1, 3-5, 8-10, 14-15, 17, 20-31, and 33-36 under 35 USC 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Beattie (US Patent 5,843,767) has been withdrawn in light of applicant's amendment of claim 1 (see Response to Argument below).

16. The rejection of claims 1, 5, and 11-13 under 35 USC 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Jansen (US Patent 5,173,097) has been withdrawn in view of applicant's amendment of claim 1 (see Response to Argument below).

***New Rejections – Necessitated by Amendment***

***Claim Rejections - 35 USC § 112***

17. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

18. Claims 1, 3-5, 8-15, 17, 19-31, 33-36, and 42-43 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s) at the time the application was filed, had possession of the claimed invention. This is a new matter rejection.

The instant claim 1 recites a device. The device comprises a drawn substrate having a length and at least two drawn channels formed therethrough, wherein the drawn substrate includes inlets and outlets in cooperating relation with the drawn channels. The drawn channels are extending in a direction parallel to the length of the substrate, and configured to allow a fluid to flow therethrough. The drawn substrate and at least two drawn channels being drawn from a preform body having corresponding channels formed therethrough wherein a layer of material defining the two channels comprises a material, which remains substantially unchanged during drawing preform body.

The recitation of 'a layer of material defining said at least two channels comprises a material, which remains substantially unchanged during drawing preform body' claimed in claim 1 and the recitation of "wherein said material is similar to that of a remaining portion of said drawn substrate" claimed in claim 42, have no clear support in the specification and the

claims as originally filed. The specification in page 9 as suggested by applicant disclosed 1) the drawn process, i.e. ‘*The preform body is heated in a furnace and drawn, stretching it along its length and reducing the cross sectional area to the desired size while maintaining its geometry, that is the final, drawn substrate cross section is geometrically similar to the cross section of the original preform body, differing essentially only in size*’ (lines 5-9); 2) “*The preform body contains channels which correspond to the drawn channels*” (line 5); 3) “*a protective coating can be applied over the drawn array as is done for optical fibers*” (lines 14-15) and the type of material for the coating (lines 16-17); 4) the type of material for the “*preform body from which the drawn substrate is to be formed*” (lines 22-24). The specification in page 16 as suggested by applicant disclosed that figure 14 refers to a drawn substrate (ref. #202) that is formed by first creating a preform body and ‘*The preform body contains both channels 204, an embedded optical waveguide made of a similar material*’ (lines 8-10), and that “*FIG. 15a provides a side view of an end cap substrate 210 which may be used as a detector device*” (lines 17-18). These disclosures are not support for limitations of ‘a layer of material defining said at least two channels comprises a material, which remains substantially unchanged during drawing preform body’ claimed in claim 1 and ‘wherein said material is similar to that of a remaining portion of said drawn substrate’ claimed in claim 42. Furthermore, the specification disclosure is silent on the claimed for limitations of ‘a layer of material defining said at least two channels comprises a material, which remains substantially unchanged during drawing preform body’ claimed in claim 1 and ‘wherein said material is similar to that of a remaining portion of said drawn substrate’ claimed in claim 42. Therefore, the scope of the invention as originally disclosed in the specification would not encompass the scope of the limitation of ‘a layer of material defining

said at least two channels comprises a material, which remains substantially unchanged during drawing preform body claimed in claim 1 and 'wherein said material is similar to that of a remaining portion of said drawn substrate' claimed in claim 42.

If applicants disagree, applicant should present a detailed analysis as to why the claimed subject matter has clear support in the specification.

#### ***Response to Arguments***

19. The prior art rejections in view of the amendment of claim 1 have been withdrawn. However since the newly added limitations have found no support in the specification, the withdrawn prior art rejections could be reinstated if claim 1 is amended to remove the limitations.

#### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MY-CHAU T TRAN whose telephone number is 571-272-0810. The examiner can normally be reached on Mon.: 8:00-2:30; Tues.-Thurs.: 7:30-5:00; Fri.: 8:00-3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, ANDREW WANG can be reached on 571-272-0811. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

mct  
December 3, 2004



PADMASHRI PONNALURI  
PRIMARY EXAMINER